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DescriptionCOMBINED NUTCRACKER AND BOTTLE OPENERTECHNICAL FIELD

5 This invention relates generally to a  
nutcracker and a bottle opener, and more particularly,  
to a nutcracker which can include an element usable for  
cracking the hard outer shell of a nut and also for  
holding and twisting a cap from a bottle, and an element  
10 for prying a cap from a bottle.

BACKGROUND OF THE INVENTION

It is well known to use plier type devices for  
cracking the hard outer shells of consumable nuts.  
15 Various plier type devices are known for loosening and  
twisting caps from bottles and jars. Also, various  
bottle openers for prying caps from bottles are known.  
A combined nutcracker and bottle opener for removing  
plugs of bottles is disclosed in Borromeo U.S. Patent  
20 No. Des 304,891 issued December 5, 1989.

Apparent shortcomings of providing different  
devices for cracking nuts, twisting caps from bottles  
and prying caps from bottles, include costs of  
purchasing the different devices, storage requirements  
25 for the devices, and clutter on bar tops and tables.  
Pry-off type bottle caps commonly found on soft drink  
bottles and beer bottles in the U.S.A. are typically  
difficult to twist off, and when twist-off caps are  
prried off there is a danger of inadvertently breaking  
30 the top glass lip of the bottle. Observed shortcomings  
of the combined nutcracker and bottle opener of the  
Borromeo patent include relatively complex manufacture  
requiring multiple pinned connections and resultant  
cost, and a lack of disclosed utility for opening  
35 bottles by other than removing plugs therefrom.

Thus, what is sought is a combination nutcracker and bottle opener which is simple to manufacture, can incorporate elements for twisting and/or prying caps from bottles, and which can be  
5 incorporated into an aesthetically pleasing shape.

#### SUMMARY OF THE INVENTION

What is disclosed is a combined nutcracker and bottle opener which overcomes one or more of the  
10 shortcomings listed above, and which can include a desired combination of elements for cracking a hard outer shell of a nut, twisting a cap from a bottle, and/or prying a cap from a bottle, and which additionally can have an aesthetically pleasing shape  
15 and is simple to manufacture.

According to one aspect of the invention, the combined nutcracker and bottle opener includes first and second body members each having a first end portion and a second end portion opposite the first end portion, the  
20 first end portions being connected in overlapping relation for relative pivotal movement about a pivotal axis therethrough for allowing pivotally moving the second end portions between a substantially overlapping position and a range of angularly related positions  
25 about the pivotal axis. The second end portion of the second body member includes a bottle opener which is at least substantially covered by the first body member when in the overlapping position and which is uncovered and usable when the second end portions are in at least  
30 one of the angularly related positions. A pair of elongate legs having proximal end portions are connected to the second end portions of the body members, respectively, and extend outwardly from the body members. The legs are positioned in generally parallel,  
35 side-by-side relation when the second end portions of

the body are in the overlapping relation, and are angularly related when the second end portions are in the angularly related positions, the legs having distal end portions opposite the proximal end portions thereof and elongate intermediate leg portions extending between the proximal and distal end portions, respectively. The intermediate leg portions adjacent the proximal ends of the legs have opposing portions adapted for receiving and holding a nut therebetween such that the legs can be grasped adjacent the distal end portions or elsewhere along the length thereof and squeezed toward one another for applying a compressive force against the nut for cracking a shell of the nut, and for holding and squeezing a cap on a bottle to allow relatively twisting the cap and the bottle for loosening the cap. The bottle opener that is exposed and usable when the legs are angularly related preferably includes a shallow slot facing the distal end of the leg for receiving a circumferential side of a bottle cap and an edge adjacent to the slot for engaging a lower side edge of the cap, the leg including an inner surface portion that preferably has a concave shape and is relatively wide and can be brought into contact with and hold and center an upper or top surface of the cap sufficiently to allow prying it from a bottle with an easy pivoting movement. This concave inner surface portion can also function as the inner surface portion for receiving and holding a nut.

According to another aspect of the invention, the proximal end or body portion of the second leg is cooperatively received in a slot in the proximal end or body portion of the first leg and pivotally connected thereto for relative pivotal movement of the legs generally on a plane through the sides of the legs between a position wherein the leg portions are

generally parallel and a range of positions wherein the leg portions are angularly related. Again, the intermediate portions of the legs have opposing inner surface portions adjacent the proximal ends of the legs adapted for receiving and holding a nut or bottle cap therebetween such that the legs can be grasped and squeezed toward one another for applying a compressive force against the nut for cracking it, or against the cap for holding and twisting it from a bottle. The proximal end portion of the second leg includes the pry-off bottle opener which is concealed in the slot of the first leg when the legs are in the generally parallel closely spaced position and which is useably positioned when the legs are pivoted one relative to the other to an angularly related open position.

According to a preferred aspect of the invention, one or both of the opposing inner surface portions of the legs adapted for holding a nut and engaging the top of a bottle cap can be concave as viewed from the front and rear only, or concave all around so as to have a bowl or dish shape or other functional shape. The inner surface portion can also include a groove or a strip of a rubbery material adapted for conformingly holding or gripping a circumferential side or edge of a bottle cap as it is twisted loose from a bottle. The groove or strip should have a width at least marginally greater than the height of a conventional commercially available twist-off bottle cap used on soft drink and beer bottles in the USA and elsewhere. The groove or strip can include spaced recesses corresponding to a serrated pattern commonly found on the circumferential edge of a cap for more securely and positively gripping and holding it. Additionally, the combined nutcracker and bottle opener preferably has an aesthetically pleasing outer shape,

such as that of the lower torso and legs of a human body.

5       An advantage of the present invention is that it provides the nutcracker in combination with either or both a bottle opener usable for prying a cap from a bottle and a bottle opener for twisting a cap from a bottle, so as to be more convenient and easy to use and require less storage and bar or table space.

10       Another advantage of the invention is that it can provide the above capabilities in a device which requires only one pivot joint so as to be relatively simple and economical to manufacture.

#### BRIEF DESCRIPTION OF THE DRAWINGS

15       Fig. 1 is a perspective view of a combined nutcracker and bottle opener according to the present invention;

      Fig. 2 is a front view of the combined nutcracker and bottle opener of Fig. 1;

20       Fig. 3 is a left side view of the combined nutcracker and bottle opener;

      Fig. 4 is a rear view of the combined nutcracker and bottle opener;

25       Fig. 5 is a right side view of the combined nutcracker and bottle opener;

      Fig. 6 is a top view of the combined nutcracker and bottle opener;

      Fig. 7 is a bottom view of the combined nutcracker and bottle opener;

30       Fig. 8 is a front view of the combined nutcracker and bottle opener showing legs thereof pivoted to an angularly related position for receiving and holding a nut therebetween;

35       Fig. 9 is a fragmentary front view of the combined nutcracker and bottle opener showing the legs

angularly related with a bottle cap squeezed therebetween for twisting from a bottle;

Fig. 10 is a front view of the combined nutcracker and bottle opener showing the legs pivoted to an angularly related position for revealing a bottle opener thereof in position for prying a cap from a bottle shown in phantom;

Fig. 11 is a fragmentary front view of the combined nutcracker and bottle opener, showing the legs in the angularly related position of Fig. 10 and the leg including the bottle opener pressed against a top surface of a bottle cap with an adjacent edge of the bottle opener engaged with a circumferential edge of the cap for prying it from a bottle;

Fig. 12 is another fragmentary front view of the combined nutcracker and bottle opener, showing the legs pivoted to another angularly related position for prying a bottle cap from a bottle;

Fig. 13 is a front view of the combined nutcracker and bottle opener showing the legs angularly related with a bottle cap disposed between inner surface portions thereof for twisting the cap from a bottle; and

Fig. 14 is a fragmentary side view of an inner surface of one of the legs of the combined nutcracker and bottle opener, showing an optional groove including serrated portions for gripping a serrated circumferential edge of a bottle cap.

#### DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

Referring now to the drawings wherein like numbers refer to like parts, Figs. 1-7 show various views of a combined nutcracker and bottle opener 20 constructed and operable according to the teachings of the present invention. As will be explained more fully below, combined nutcracker and bottle opener 20 is

easily and conveniently usable for cracking the hard outer shells of a variety of nuts commonly consumed by humans, including, but not limited to, brazil nuts, walnuts, pistachios, and peanuts. Opener aspects of  
5 combined nutcracker and bottle opener 20 can be utilized for twisting off the well known commercially available twist-off type caps, and prying off those caps, as well as the well known commercially available pry off caps.

Nutcracker and bottle opener 20 includes a  
10 first elongate leg 22 having a proximal end portion 24, a distal end portion 26 opposite proximal end portion 24, and an intermediate leg portion 28 extending between proximal and distal end portions 24 and 26. A first body portion 30 is connected to proximal end portion 24  
15 so as to extend longitudinally and sidewardly in cantilever relation thereto. First body portion 30 includes an upper portion 32, an opposite lower portion 34 which connects to proximal end portion 24, a front surface portion 36, an opposite rear surface portion 38,  
20 and opposite side surface portions 40 and 42 extending therebetween.

Combined nutcracker and bottle opener 20 additionally includes a second elongate leg 44 having a proximal end portion 46, a distal end portion 48, and an  
25 intermediate leg portion 50 extending therebetween.

Legs 22 and 44 are desirably pivotable one relative to the other about a forward to rearwardly extending axis therethrough adjacent proximal end portions 24 and 46. This is preferably achieved by  
30 providing a second body portion 52 connected to leg 44 extending longitudinally and sidewardly from proximal end portion 46 in cantilever relation thereto. Second body portion 52 preferably has a profile shape when viewed from the front or rear corresponding to that of  
35 first body portion 30, and further has a relatively

narrow front to rear extent, so as to be cooperatively receivable in a longitudinally and sidewardly open slot 54 in body portion 30. Body portions 30 and 52 are connected together by a pin 56 extending therethrough for relative pivotal movement about a forwardly and rearwardly extending pivotal axis 58, as variously illustrated in Figs. 8-13 and discussed below.

More particularly, as shown in Figs. 1-7, legs 22 and 24 can be positioned in a generally parallel, closed position, and can be relatively pivoted from that position through a range of angularly related positions up to and including about 300° apart, as illustrated by the various positions shown in Figs. 8-13, for performing nutcracking and bottle opening functions. In this regard, legs 22 and 44 are shown relatively pivoted to an angularly related open position for receiving a nut 60 between opposing inner surface portion 62 and 64 of intermediate leg portions 28 and 50 adjacent proximal end portions 24 and 46. In this position, the legs are squeezable one toward the other, as denoted by the arrows A, for exerting a compressive force against nut 60 for cracking its outer shell in the well known manner. To facilitate the holding of nut 60 in the desired position adjacent proximal end portions 24 and 46, one or more of inner surface portions 62 and 64 can include an element such as a concave receptacle such as receptacles 66 and 68 therein adapted for receiving and cradling opposite portions of a nut. Here, receptacles 66 and 68 have a three dimensional bowl or dish shape, but it should be understood that it is contemplated that other shapes could also be used, as well as other means for holding a nut, such as a surface which is roughened, or one including serrations or teeth, or a rubbery pad, or the like.



Referring to Fig. 9, inner surface portions 62 and 64 of legs 22 and 44 can be pivotally positioned in spaced apart relation for receiving a conventional twist-off type bottle cap 70 therebetween and squeezed as denoted by arrows A for holding the bottle cap to allow twisting it relative to a bottle on which it is located (not shown) as denoted by arrow B for loosening and removing the bottle cap from the bottle. Again, concave receptacles 66 and 68 are shown to facilitate locating and holding bottle cap 70.

Figs. 10 and 11 show legs 22 and 44 pivoted to an open position about 90° apart to reveal a bottle opener 72 on second body portion 52 of leg 44. Bottle opener 72 is at least substantially concealed in or covered by body portion 30 of leg 22 when legs 22 and 44 are in the closed position and closer together angularly related positions, such as that shown in Figs. 8 and 9. Bottle opener 72 includes a slot 74 generally facing distal end portion 48 extending from inner surface portion 64 to an opposing edge 76 on body portion 52. Slot 74 has a width from surface 64 to edge 76 which is preferably just marginally greater than a height of a conventional commercially available crimped bottle cap 70 so as to be capable of receiving a circumferential side portion 78 of cap 70 such that edge 76 is positioned for contacting a lower circumferential edge portion 80 of the cap for prying it from a bottle, such as bottle 82 shown, when leg 44 is pivoted about the cap as denoted by arrow C in Fig. 11. To facilitate the centering of leg 44 on cap 70, inner surface portion 64 preferably has a concave region 84 positioned for contacting an upper surface portion 86 of cap 70 opposite and spaced from circumferential side portion 78 and edge portion 80. Concave region 84 can optionally include the previously discussed concave receptacle 68

as shown in Fig. 11, for more positively centering leg 44 with respect to bottle cap 70 and to provide a sharper angle with respect to edge 76 of opener 72 for facilitating and enhancing the prying action of opener 72.

Referring to Fig. 12, leg 22 is shown pivoted to almost its maximum extent from the closed position relative to leg 44 so as to be capable of being brought to bear against an edge 88 of leg 44, for prying a cap 70 from a bottle 82 using opener 72. As before, circumferential side portion 78 of cap 70 is receivable in slot 74, such that edge 76 of opener 72 can be brought to bear against circumferential edge portion 80 of cap 70 and concave region 84 can contact upper surface portion 86 of the cap for prying it from the bottle. Also again, concave region 84 can include a receptacle 68 for receiving and cradling upper surface portion 86 of cap 70 to facilitate centering the opener on the cap. Here, the force for applying the prying action against cap 70 is exerted against leg 22, as denoted by arrow D, which has been found to provide somewhat greater leverage or mechanical advantage for prying compared to when prying using leg 44.

Turning to Fig. 13, combined nutcracker and bottle opener 20 is shown including optional concave receptacles 66 and 68 on inner surface portions 62 and 64 at an optional location closer to distal ends 26 and 48, respectively. This can be in addition to or instead of those receptacles discussed earlier in reference to Figs. 8 and 9, and provides another convenient location for engaging a bottle cap, such as bottle cap 70, for twisting it from a bottle.

As shown in Fig. 14, receptacle 66 and/or receptacle 68 can include a pattern of recesses 90 adjacent the longitudinally extending sides thereof for

engaging a serrated portion of a cap such as cap 70 to provide better gripping. Other elements for enhancing gripping action of nuts and bottle caps can include, but are not limited to, soft rubbery strips or the like, and can be located at any desired longitudinal location on inner surface portions 62 and 64, as denoted by elements 92 in Fig. 2. As a result, combined nutcracker and bottle opener 20 is adapted for use for cracking the hard outer shells of common edible nuts, and also loosening and removing both pry-off and twist-off caps commonly found on popular soft drink and alcoholic beverage bottles. Legs 22 and 44 can also be squeezed about corks and plugs of bottles such as wine bottles, for loosening and/or removing them. The single pivotal connection of the legs of the present device makes it simple to manufacture from a variety of common materials, including, but not limited to, wood, plastics, and/or metal. Advantageously, the combined nutcracker and bottle opener of the present invention is well suited to have the shape of the lower torso and legs of a human body, as evident from the illustrations, although other shapes can also be used.

Thus, there has been shown and described a novel nutcracker and bottle opener, which overcomes many of the problems set forth above. It will be apparent, however, to those familiar in the art, that many changes, variations, modifications, and other uses and applications for the subject device are possible. All such changes, variations, modifications, and other uses and applications that do not depart from the spirit and scope of the invention are deemed to be covered by the invention which is limited only by the claims which follow.